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To:	Fax No:	Company:	Phone No.:
Examiner Allen J. Flanigan	571-273-8300	US PTO	

File No.: 06-0561

Re: Serial No.: 10/755,632  
Filing Date: 1/12/2004  
Group Art Unit: 3744  
Confirmation No.: 1072

Date: June 4, 2007

No. Pages: Including Cover Sheet 112

Notes: Please find enclosed herewith the following documents relating to the above-referenced case:

- 1) Appellant's Amended Brief on Appeal having 18 pages;
- 2) Related Decisions having 94 pages.

Baumann et al.  
USSN 10/755,632, filed 1/12/2004  
Appellant's Brief on Appeal, filed June 4, 2007

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Baumann et al.	)	Examiner: Allen J. Flanigan
Serial No.: 10/755,632	)	Group Art Unit: 3744
Confirmation No.: 1072	)	Docket No.: 06-0561
	)	
For: High Conductivity Finstock Alloy,	)	Filed: January 12, 2004
Method of Manufacture and Resultant Product	)	

June 4, 2007  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANT'S AMENDED BRIEF ON APPEAL**

**1. Real Party in Interest**

The real party in interest of the present application is Alcoa Inc., the assignee of the entire right, title, and interest in the above-identified patent application.

**2. Related Appeals and Interferences**

No other appeals or interferences are known which directly affect, or will be directly affected by, or have a bearing on the disposition of the pending appeal.

**3. Status of the Claims**

The present application was filed on April 17, 2000, with Claims 1-28. In response to a Restriction Requirement imposed in an Office Action dated September 22, 2005, Appellants elected without traverse, to prosecute Claims 1-17, in a response dated October 20, 2005. The non-elected claims, i.e. 18-28, were subsequently withdrawn from examination.

A first Office Action on the merits issued December 12, 2005, including rejections under 35 U.S.C. §§ 102, and 103, to which Appellants filed an Amendment and Response dated March 13, 2006. In this response, Applicants amended Claims 1, 4, 10, 14, and 17. A Final Rejection was issued on May 8, 2006, in which the Examiner withdrew the rejections under 35 U.S.C. §102 but maintained the rejections under 35 U.S.C. §103. In response to the Final Rejection, Appellants submitted remarks in a Response under 37 C.F.R. §1.116, dated July 10, 2006, in

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which there were no amendments to the claims. An Advisory Action was issued on July 20, 2006, in which the Examiner maintained the rejection to Claims 1-17. A Request for Continued Examination was filed on September 8, 2006. A second Final Rejection was issued on December 18, 2006. Appellants filed a Notice of Appeal on January 18, 2007.

Thus, Claims 1-17 are the subject of this Appeal. These claims, as they presently stand, are set forth in the Appendix of this Appeal Brief. The status of each of the Claims is thus as follows:

Claims 1-17: Finally rejected and on appeal.

Claims 18-28: Withdrawn.

#### **4. Status of the Amendments**

No amendments or remarks were filed following the Final Rejection dated December 18, 2006. Therefore, Claims 1-17 stand, on appeal, as recited in the Appellants' response dated July 10, 2006.

#### **5. Summary of the Claimed Subject Matter**

Independent claim 1, on appeal, relates to finstock comprising an aluminum alloy of about 0.7% to about 1.2% Si, greater than 2.0 to about 2.4% Fe, about 0.6-1.0% Mn, up to about 0.5% Mg, up to about 2.5% Zn, up to about 0.10% Ti, and up to about 0.05% In, with a remainder comprising of Al and tolerable impurities, wherein the aluminum alloy when cast into an alloy strip and reduced by cold rolling produces a finstock that is substantially free of breakage. The inventive alloy when cast into an aluminum alloy strip is substantially free of coarse intermetallics, and is suitable for cold rolling into an aluminum alloy fin stock without resulting in cracking or breaking of the aluminum alloy strip. Referring to Paragraphs 0037-0050 of Applicant's disclosure, Applicant discloses that the claimed composition is suitable for aluminum fin stock when cast in a manner as to produce an alloy strip substantially without coarse intermetallics, such as primary Fe-bearing intermetallics, and without heavy bands of eutectic segregation in the form of centerline segregation. One example of a casting method that may be used in conjunction with the claimed composition is described in paragraphs 0061 to 0069 of Applicant's disclosure. Prior aluminum alloy's having an Fe content within the range

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claimed by the Applicant's, could not be cold rolled without substantial cracking and therefore could not be utilized for a fin stock alloy.

Independent claim 10, on appeal, relates to a fin for a heat exchanger, the fin comprised of about 0.7% to about 1.2% Si, greater than 2.0 to about 2.4% Fe, about 0.6-1.0% Mn, up to about 0.5% Mg, up to about 2.5% Zn, up to about 0.10% Ti, and up to about 0.05% In, with a remainder comprising of Al and tolerable impurities, wherein the aluminum alloy when cast into an alloy strip and reduced by cold rolling produces a finstock that is substantially free of breakage. The above description of the finstock alloy is applicable to independent claim 10. The inventive finstock is depicted in Figure 2.

Independent claim 14, on appeal, relates to a brazed aluminum heat exchanger comprising at least one tank structured to hold a coolant; a header plate coupled to said at least one tank, said header plate including a plurality of apertures; a plurality of substantially parallel fluid-carrying tubes each extending substantially perpendicular from one of said plurality of apertures in said header plate and structure to receive coolant therethrough; and a plurality of fins disposed between said plurality of fluid-carrying tubes, said fins being substantially free of cracks and in thermal communication with said plurality of fluid-carrying tubes and structured to transfer heat away therefrom, in order to cool said coolant as it circulates therein, said plurality of fins comprising: an aluminum alloy finstock comprised of about 0.7-1.2% Si, greater than 2.0 to about 2.4% Fe, about 0.6-1.0% Mn, up to about 0.5% Mg, up to about 2.5% Zn, up to about 0.10% Ti, and up to about 0.05% In, with the remainder comprising Al and tolerable impurities. The above description of the finstock alloy is applicable to independent claim 14. The inventive finstock is depicted in Figure 2.

**6. Grounds of Rejection to be Reviewed on Appeal**

- I. Do the combined disclosures of U.S. Patent No. 6,620,265 to Kawahara et al., and U.S. Patent No. 6,660,108 to Doko et al. render Claims 1-17, on appeal, unpatentable under 35 U.S.C. §103(a).